



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
TRAFFIC OPERATIONS DIVISION
SUITE 1800, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 253-1122

HOWARD H. ELEY
COMMISSIONER

BILL LEE
GOVERNOR

TO: Ben Price, Assistant Chief Engineer of Operations

FROM: Lee Smith, Interim Director of Traffic Operations


SUBJECT: **Proprietary Item Request and Justification**
City of Johnson City

The City of Johnson City is requesting the following items be used in all signalization projects within their jurisdiction over the next three years where Federal and/or State funding are used.

- 1) **Traffic Signal Controllers:** Siemens Eagle Controllers including the EPAC-Series.
- 2) **Traffic Signal Communications:** Siemens Ethernet Switches.
- 3) **Traffic Signal Pedestrian Detection:** Polara Audible Pedestrian System Detection.
- 4) **Roadway Lighting:** Phillips and Cooper LED Light Fixtures.

The above items are essential for synchronization with existing facilities. The City of Johnson City staff has been extensively trained to install, operate, maintain, program, troubleshoot, and repair these items. This allows technicians to quickly diagnose issues which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system. The City of Johnson City has requested these light fixtures to be consistent with the requirements of the local utility company. By utilizing these items as the standard for the City of Johnson City, there will be a cost savings in stocking replacement equipment and will result in faster and less costly repair. See attached letters for additional justification details of this request.

I, Lee Smith, Interim Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.


Lee Smith (Jul 8, 2022 08:10 CDT)

Interim Director of Traffic Operations



Assistant Chief Engineer of Operations

Jul 8, 2022

Date

June 3, 2022

Mr. Steve Bryan, P.E.
Traffic Operations Division, Traffic Engineer
Tennessee Department of Transportation
James K. Polk Bldg., 12th Floor
505 Deadrick Street
Nashville, TN 37243-0348

RE: Johnson City Signalization Components of Projects with Federal Funds

Dear Mr. Bryan:

The City of Johnson City is requesting a certification to specify the Siemens Eagle EPAC traffic signal controllers to be used in the signalization component of projects within Johnson City's control and maintenance over the next 3 years using federal or state funds. We request the EPAC controller to provide full synchronization and extended capabilities. Our inventory of existing equipment is comprised entirely of the Siemens Eagle EPAC controllers, and, as noted below, you will see that our current solid state controllers used in the field are exclusively the EPAC controllers.

- 102 EPAC controllers
- 27 spare EPAC controllers

Thank you for considering these requests to better serve the public with increased safety and efficiency through normal operations and maintenance activities. If you have any questions, feel free to contact me at 423-975-2733 or at atodd@johnsoncitytn.org.

Sincerely,



Anthony Todd
Traffic Engineering Manager

June 3, 2022

Mr. Steve Bryan, P.E.
Traffic Operations Division, Traffic Engineer
Tennessee Department of Transportation
James K. Polk Bldg., 12th Floor
505 Deadrick Street
Nashville, TN 37243-0348

RE: Johnson City Signalization Components of Projects with Federal Funds

Dear Mr. Bryan:

The City of Johnson City is requesting a certification to specify the Siemens Ethernet switch to be used in the traffic signal and traffic surveillance cabinets for projects within Johnson City's control and maintenance over the next 3 years using federal or state funds. We request the Siemens switch to provide full compatibility and we already have knowledge of how to program and maintain this switch. The other switches we have are Kyland switches that require either a prewired card rack with an available slot or special cabinet modification to power the switch that is not available at many cabinets. Our inventory of existing equipment is comprised primarily of the Siemens switch, as noted below. The other switches are not deployed. All of the Siemens switches in use are connected to the TMC.

- 94 Siemens switches that can be DIN rail mounted or can be placed on the shelf
- 2 Siemens 19" rack mount hub switches
- 3 spare Siemens Ethernet switches
- 3 spare Kyland switches

Thank you for considering this request to better serve the public with increased safety and efficiency through normal operations and maintenance activities. If you have any questions, feel free to contact me at 423-975-2733 or atodd@johnsoncitytn.org.

Sincerely,



Anthony Todd
Traffic Engineering Manager

June 8, 2022

Mr. Steve Bryan, P.E.
Traffic Operations Division, Traffic Engineer
Tennessee Department of Transportation
James K. Polk Bldg., 12th Floor
505 Deadrick Street
Nashville, TN 37243-0348

RE: Johnson City Signalization Components of Projects with Federal Funds

Dear Mr. Bryan:

The City of Johnson City is requesting a certification to specify the Polara audible pedestrian buttons to be used in the signalization component of projects within Johnson City's control and maintenance over the next 3 years using federal or state funds. We request the Polara audible buttons to be in compliance with TDOT requirements and to provide full remote monitoring of pedestrian activity to ensure they are serving their intended purpose. Our existing audible pedestrian buttons equipment in operation is comprised entirely of the Polara buttons, as noted below. We will be stocking only Polara buttons due to their functionality, capabilities, and our familiarity with setting them up, programming and operating them. The buttons and control units in the cabinet cannot be mixed between manufacturers.

- 8 Polara audible pedestrian button systems

Thank you for considering these requests to better serve the public with increased safety and efficiency through normal operations and maintenance activities. If you have any questions, feel free to contact me at 423-975-2733 or at atodd@johnsoncitytn.org.

Sincerely,



Anthony Todd
Traffic Engineering Manager

June 8, 2022

Mr. Steve Bryan, P.E.
Traffic Operations Division, Traffic Engineer
Tennessee Department of Transportation
James K. Polk Bldg., 12th Floor
505 Deadrick Street
Nashville, TN 37243-0348

RE: Johnson City Streetlighting Components in Projects with Federal Funds

Dear Mr. Bryan:

The City of Johnson City is requesting a certification to specify specific streetlighting luminaires to be used in the lighting components of projects within Johnson City's control and maintenance responsibility over the next 3 years using federal or state funds. The City of Johnson City has an agreement with BrightRidge to install and maintain the streetlights that are both within the city and their coverage area. We request the lights that they stock for use on city streets and state routes be used on projects calling for lighting to allow BrightRidge to properly, quickly and efficiently provide maintenance on these lights. Over 95% of the streetlights in Johnson City are installed and maintained by BrightRidge. The lights that would be used on these projects that we request certification on are as follows:

- Philips 72 watt LED RFM cobra head, type 2, 4000k
- Cooper 55-60 watt LED Granville post top, without cover, type 3, 5000k
- Cooper 100 watt LED Washington post top, without cover, type 3, 5000k
- Cooper 138-143 watt LED Verdeon cobra head, type 2, 4000k

Thank you for considering these requests to better serve the public with increased safety and efficiency through normal operations and maintenance activities. If you have any questions, feel free to contact me at 423-975-2733 or at atodd@johnsoncitytn.org.

Sincerely,



Anthony Todd
Traffic Engineering Manager

Ken Edgar
BrightRidge
P.O. Box 1636
Johnson City, Tennessee 37605-1636

June 15, 2022

Mr. Anthony Todd
Traffic Engineering Manager
City of Johnson City, Tennessee
601 E. Main Street
Johnson City, Tennessee 37601

Dear Mr. Todd,

This letter is to request that on any future streetlighting projects in Johnson City where additional lights are to be installed among existing lights, especially in the downtown area, that the new lights match the existing lights. We have the existing light fixtures set up as proprietary items from specific manufacturers so as to maintain lights that are consistent in appearance and performance. It also allows us to maintain fewer types of lights and replacement parts. The lights which we provide for the City's streetlighting in the downtown area are:

<u>Manufacturer</u>	<u>Description</u>
Philips	72 watt LED RFM cobra head, type 2, 4000k
Cooper	55-60 watt LED Granville post top, without cover, type 3, 5000k
Cooper	100 watt LED Washington post top, without cover, type 3, 5000k
Cooper	138-143 watt LED Verdeon cobra head, type 2, 4000k

I appreciate you taking this request into consideration. Please contact me at 423-952-5030 if you need any additional information.

Sincerely,



Ken Edgar
Field Engineer Supervisor